



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

guished by the single postfrontal. Five other genera have been enumerated* which possess this structure, but none of them have any close affinity with the present. Specifically it resembles the *Dromicus callilæmus* from Jamaica; it may also be loosely compared to the Cuban *Arrhyton tæniatum*.

Hab.—Cuba. Mus. Smithsonian, Prof. Poly. Coll.

Arrhyton fulvum.

Arrhyton taniatum Cope, Proc. Acad. Nat. Sci. Philad. 1860, p. 421.

This species differs from the *A. tæniatum* in its broader head and more acute muzzle. The preocular plate is larger, the postfrontal in contact with the second labial only; the vertical is shorter, with more convergent outer borders. Temporals six or seven on each side, the anterior as deep as long. The head and body above the third row of scales is deep brown; the lateral band occupies the fourth and fifth and half the third and sixth rows of scales; the median the vertebral series alone. In *tæniatum* these bands are of equal width, occupying one and two half rows.

Hab.—Cuba. Mus. Smithsonian.

Arrhyton bivittatum.

Scales in seventeen longitudinal rows. Dentition, as in other species of the genus, strongly diacranterian. Head wider than body, arched in profile, with acute prominent muzzle. Rostral plate visible from above: nasal plates united? Loreal present, longer than high, rectangular. Preocular plate a little higher. Superior labials seven, third and fourth entering the orbit. Postoculars two; temporals, three large, two small, anterior broad: the external borders of the vertical parallel. Prefrontals not small. Inferior labials seven; anterior genials longer. Total length 11 in.; tail 3 in. 2 lin.

General color brown; a blackish band on each side which occupies the adjacent halves of the scales of the third and fourth rows.

Hab.—Cuba. Mus. Smithsonian, (No. 5784.)

Monograph of the species of *TROGOSITA*, inhabiting the United States.

BY GEORGE H. HORN, M. D.

The publication of the present paper was suggested by the neglected condition of the genus. Many American species have been published from time to time by various authors, amounting to about twelve or thirteen, of which Melsheimer (Proc. Acad. ii.) and Pal. de Beauvois, (Ins. d'Afrique et d'Amerique) have published one half, the other half being scattered among various authors. It is to be feared that Beauvois has, from describing insects from two widely separated parts of the globe, caused confusion by the mingling of specimens. Some of his other American (?) insects remain unknown even now. The possession of several of Melsheimer's types enables us to determine their true value with certainty.

The species here described have been derived in great part from the collection of Dr. Le Conte, with whom all the typical specimens will be found, the collections from other sources serving rather to increase the number of specimens than species.

Our species may be arranged in groups as follows:

Sec. A. Antennæ with the eighth joint equal to the ninth. Species 1—2.

Sec. B. Antennæ with the eighth joint much smaller than the ninth:

1. Sides of thorax sinuate or rounded, strongly emarginate before the posterior angles, which are acute. Species 3—6.
2. Thorax subquadrate, sides moderately rounded, posterior angles acute.
 - a. Convex Species 7—10.
 - b. Depressed Species 11—13.

* Proc. Ac. Nat. Sci. Phil. 1861, pp. 302, 524.

3. Thorax broad, subtransverse sides much rounded, posterior angles small, obtuse. Species 14—20.
4. Thorax broad, sides strongly rounded posterior angles scarcely evident. Species 21.

A.

1. *T. mauritanica*, nigro picea, obscura, modice depressa, capite thoraceque parce grosse punctatis, hoc linea dorsali lævi, lateribus, sinuatis, antice latiore, postice angustato, margine vix reflexo, basi rotundato, angulis posticis parvis acutis, elytris oblongis, basi late emarginatis, striis punctatis interstitiis paulo convexis, rugulosis, biserialiter subtiliter punctulatis, abdomine prosternoque parce punctatis, gula postice subtiliter punctulata, antice grosse punctata, antennis pedibusque rufis. Long. .38.

T. mauritanica, Linn. (Tenebrio,) Mann. Bull. Mosc. 1843, 302.

T. caraboides, Fab. 1, 151.

This species has been carried all over the world in articles of commerce; specimens have been received from Europe, Cuba, Sierra Leone, Texas and Pennsylvania. With the succeeding species, the *mauritanica* forms a natural section, characterized by having the joints of the antennæ gradually increasing in breadth, while, in the next group, the last three joints are suddenly larger, forming a loose club. These two forms appear to be characteristic, the former of the species of the eastern hemisphere, the latter of those of North and South America.

2. *T. nitida*, nigro-picea nitida, modice depressa, subtus subtiliter punctulata capite thoraceque parce subtiliter punctulatis, hoc antice latiore, postice angustato, lateribus sinuatis, margine reflexo, angulis posticis, acutis reflexis, basi rotundato, elytris oblongis, basi vix emarginatis humeris rectis, striis punctatis interstitiis planis parce rugulosis biserialiter subtiliter punctulatis, abdomine prosternoque parce subtiliter punctulatis, gula antice parce grosse punctata, postice læve, antennis pedibusque piceo-rufis. Long. .40.

This species like the *mauritanica* has been imported. Numerous specimens were obtained from a vessel from Sierra Leone, in the spring of 1861, since then others have been found in the neighborhood of Philadelphia. In its general form it resembles closely the *mauritanica*, from which it may be readily distinguished by its more glossy appearance, and less deeply and closely punctured head and thorax. The posterior angles of the thorax are somewhat larger, more acute, and slightly reflexed. The under surface of the body is also more finely and less densely punctured.

B—1.

3. *T. californica*, nigro-picea, subnitida, depressa, capite thoraceque parce grosse punctatis, hoc antice latiore, postice angustato lateribus sinuatis ante angulos emarginatis, his acutis reflexis, margine vix reflexo, basi rotundato, medio truncato, elytris oblongis, basi late emarginatis versus humeros impressis, his rectis, striis valde punctatis interstitiis planis, parce rugulosis, biserialiter subtiliter punctulatis, antennis pedibusque rufis, abdomine prosternoque parce subtiliter punctulatis, gula antice vix punctulata, postice subplicata. Long. .40.

California, one specimen; Dr. Le Conte. This is the largest California species yet known. The thorax is much broader anteriorly than long, the breadth posteriorly is about equal to its length. The sides are sinuate, anterior to the angles deeply emarginate. This character is possessed in a greater or less degree by all of the California species. In all of this group the posterior angles are well developed, acute and slightly reflexed.

4. *T. crassicornis*, rufa subnitida, depressa, subtus parce punctata, capite thoraceque parce grosse punctatis hoc medio læviore, antice latiore postice angustato, lateribus haud rotundatis, ante angulos emarginatis, his acutis reflexis 1862.]

margine reflexo, basi modice rotundato medio truncato elytris oblongis basi late emarginatis, humeris rectis, striis punctatis, interstitiis planis vix rugulosis, biserialiter subtiliter punctulatis, gula modice rugosa. Long. .23.

California, one specimen; Dr. Le Conte. Distinct from the preceding by its smaller size, more depressed form, and less deeply punctured head and thorax. Its color is light rufous, probably immature. The antennæ in this species are much shorter, and the joints much more globose, than in any other of this group. The eighth joint is not as much smaller as in all the other American *Trogositæ*, exhibiting thus a relationship with Section A.

5. *T. pleuralis*, nigro-picea depressa, capite thoraceque parce grosse punctatis, hoc lateribus densiore punctatis et colore ferrugineis, antice latiore postice angustato, lateribus modice rotundatis ante angulos modice emarginatis, margine reflexo, basi rotundato, elytris oblongis, basi rectis, striis punctatis, interstitiis planis rugulosis, biserialiter subtiliter punctulatis punctatis, abdomine parce grosse punctato, gula prosternoque parce subtiliter punctulatis, antennis pedibusque nigro ferrugineis. Long. .23—.30.

California, two specimens; Dr. Le Conte. This species is the most depressed of this group, resembling the *collaris*, Sturm. The sides of the thorax and anterior portion of the head are ferrugineous. The elytra are much wider in proportion to their length than in any others of this group.

6. *T. limbalis*, brunnea, modice convexa, capite thoraceque dense punctatis, hoc lateribus rotundatis, antice latiore, postice angustato, ante angulos vix emarginatis, his acutis, margine reflexo, basi rotundato, elytris oblongis basi late emarginatis, humeris rectis, striis punctatis, interstitiis, planis, nitidis, biserialiter subtiliter punctulatis, gula transverse plicata antennis pedibusque pallidioribus. Long. .22.

T. limbalis, Mels. Proc. Acad. ii. 109.

Pennsylvania, two specimens; Dr. Le Conte. Resembles *crassicornis*, from which it differs by its more convex form, its smooth elytral interspaces, and the plications of the gular region, which are in three transverse series. The antennæ are of normal form, the eighth joint being much smaller than the ninth.

7. *T. corticalis*, nigra, subnitida, modice convexa, capite thoraceque grosse punctatis, hoc lateribus modice rotundatis, antice latiore, postice vix angustato, margine reflexo, angulis posticis acutis, basi rotundato, elytris oblongis, basi vix emarginatis, humeris rectis, striis punctatis, interstitiis modice convexis, subtiliter rugulosis, biserialiter subtiliter punctulatis, abdomine prosternoque grosse punctatis, gula haud plicata, pedibus nigris, antennis nigro-ferrugineis. Long. .33.

T. corticalis, Mels. Proc. Acad. iii. p. 109.

Common in Pennsylvania. This is, probably, the best known of all our species. It may be found under the bark of stumps, at almost any season. The thorax is broader than long, coarsely punctured, and in Melsheimer's typical specimen with the sides near the margin with shallow impressions. The elytra are twice as long as broad, and slightly dilated behind the middle.

8. *T. intermedia*, nigro-picea, subnitida, convexa, capite thoraceque parce grosse punctatis, hoc lateribus rotundatis, antice latiore postice angustato, margine reflexo, angulis posticis acutis vix reflexis, elytris oblongis, basi late emarginatis, versus humeros impressis his rectis, striis punctatis, interstitiis planis parce rugulosis, biserialiter subtiliter punctulatis, abdomine confertim punctulatis, prosterno parce punctato, gula subplicata. Long. .32.

Kansas two, San Jose one specimen. The species resembles the *corticalis* differing in the more elongate thorax which is more narrowed posteriorly, the posterior angles are better developed and slightly reflexed, its body is less depressed, and the sides of the elytra more nearly parallel.

[Feb.

9. *T. dubia*, Mels, nigro-picea, convexa, capite thoracque grosse punctatis, hoc antice latiore, postice parum angustato, lateribus vix rotundatis, angulis posticis acutis, margine reflexo, basi rotundato, elytris oblongis, humeris rectis, basi rectis, versus humeros impressis, striis punctatis, interstitiis planis, parce rugulosis, biserialiter subtiliter punctulatis, abdomine prosternoque subtiliter punctulatis, gula triseriatim transverse-plicata, antennis pedibusque nigro-ferrugineis. Long. .25.

T. dubia, Mels. Proc. Acad. ii. 110.

Pennsylvania, common. Resembles both the *corticalis* and *intermedia*, but is smaller than either. Its thorax is more quadrate, the sides neither so much rounded as in the former, nor so convergent as in the latter species. The gular region is rendered less smooth than in the other two by the presence of three transverse ridges or folds.

10. *T. semicylindrica*, rufa, valde convexa, subtus parce grosse punctata, capite thoracque parce punctatis, hoc quadrato, versus latera vix punctata, postice haud angustato, lateribus vix rotundatis, angulis posticis rectis, margine reflexo, basi rotundato, elytris oblongis humeris rectis, basi late emarginatis, striis grosse punctatis, interstitiis planis, vix rugulosis, biserialiter subtiliter punctulatis, gula transverse-plicata, femoribus antennisque pallidioribus. Long. .23.

Two specimens, Georgia; Dr. Le Conte. This can hardly be confounded with any other American *Trogosita*. Its form is rather elongate, very convex and with parallel sides; the thorax is nearly quadrate, slightly narrower posteriorly, the posterior angles right, and with coarse punctures not closely arranged. The interstitial spaces are flat, scarcely roughened and having the two rows of smaller punctures very poorly marked, in some interspaces but one row appearing. Its color is light rufous, with a slight brassy refulgence. It may be immature.

B—2b.

11. *T. nana*, rufo-picea, depressa, capite thoracque parce grosse punctatis, hoc antice latiore, postice parum angustato, lateribus modice rotundatis, margine reflexo, angulis posticis acutis parvis, basi rotundato elytris oblongis, striis punctatis, interstitiis modice convexis, parce rugulosis, biserialiter subtiliter punctulatis, prosterno vix punctulato, gula antice abdomineque parce grosse punctato, gula postice transverse plicata. Long. .24.

T. nana, Mels. Proc. Acad. ii. p. 110.

? *T. mutica*, Palisot de Beauv. Ins. p. 126, pl. 32, fig. 6.

Pennsylvania, common. This species can hardly be confounded with any other. The thorax is slightly broader than long, its sides moderately rounded, and somewhat convergent posteriorly. The elytra are about twice as long as wide, with the sides moderately rounded, and broader behind the middle. Its color approaches castaneous. The color of the species of the genus *Trogosita* is generally black or dark brown, hence from the color of this and the preceding species, their immaturity might be inferred, but in this instance the color appears constant, being the same in each individual of a full series, collected during several seasons.

12. *T. collaris*, valde depressa, subtus vix punctulata, capite thoracque parce subtiliter punctulatis, rubris, hoc antice latiore, postice vix angustato lateribus rotundatis, margine reflexo, angulis posticis acutis, basi rotundato, elytris oblongis, nigris, humeris rectis, basi emarginatis, striis vix punctulatis, interstitiis planis, lævis, vix biserialiter punctulatis. Long. .23—.28.

T. collaris, Sturm., Ins. Deutsch ii. p. 246. pl. 48.

T. nigripennis, Dej. Catal.

Georgia, two specimens; Dr. Le Conte. The color alone would serve to distinguish this from any other species. The head and thorax are of an orange red, and the elytra black. In shape this resembles the preceding species. Its 1862.]

thorax and head are much more finely punctured, the elytra smooth, scarcely striate and the intermediate rows of smaller punctures scarcely evident. Excepting the *obtusata*, this is the most depressed of our *Trogositæ*.

13. *T. sinuata*, nigro-picea nitida, depressa, capite thoraceque sat parce punctatis, hoc latitudine paulo brevior, postice parum angustato, lateribus late rotundatis, postice sinuatis, margine fortius reflexo, angulis posticis rectis, basi sinuatim truncata, elytris oblongis, basi late emarginatis, humeris rectis, striae punctatis haud impressis, interstitiis planis, parce rugulosis, biserialiter subtiliter punctulatis, antennarum pedibusque piceo rufis, abdomine prosternoque parce subtiliter punctulatis gula antice vix punctulata, postice, laevi nitida. Long. .28.

T. sinuata Lec. Proc. Acad. Nat. Sci. 1861, p. 344.

East of Fort Colville, one specimen; Mr. Gibbs. This species resembles in appearance *T. corticalis* Mels., and several others from the Atlantic States, but is easily known by the thorax being less transverse and less narrowed behind, with the hind angles more prominent, and the base not rounded, but nearly truncate and sinuate, and slightly emarginate at the middle.

B—3.

14. *T. cucujiformis*, rufa, valde depressa, capite thoraceque parce grosse punctatis, hoc lateribus rotundatis, antice latiore, postice parum angustato, margine vix reflexo, angulis posticis parvis, obtusis, basi rotundato, elytris oblongis, humeris rectis, basi vix emarginatis, striae punctatis, interstitiis planis, parce rugulosis, biserialiter subtiliter punctulatis, abdomine subtiliter punctulatis prosterno grosse punctato, gula antice punctulata, postice transverse plicata. Long. .20.

One specimen, Pennsylvania; Dr. Le Conte. This is the most depressed species of the group. Its upper surface is flat, much more so than in any other known species. The thorax is about one half wider than long, with the sides moderately rounded, scarcely converging posteriorly.

15. *T. nigrita*, nigro-picea subnitida, modice depressa, capite thoraceque parce grosse punctatis, hoc lateribus rotundatis, margine fortiter reflexo, angulis posticis obtusis, basi rotundato, elytris oblongis, humeris rectis, basi late emarginatis, striae punctatis, interstitiis convexis, rugulosis, biserialiter subtiliter punctulatis, gula antice grosse punctata, postice laevi, prosterno parce subtiliter punctulato, abdomine confertim punctulata. Long. .22—30.

Kansas, two specimens; Dr. Le Conte. This species resembles the *castanea*, Mels. It may be readily distinguished by the less transverse thorax, the more reflexed margin and more rounded sides. The interstitial spaces are more convex and rugulose than in either of the two succeeding species.

16. *T. castanea*, nigro-picea, modice depressa, capite thoraceque confertim subtiliter punctulatis, hoc lateribus rotundatis, margine reflexo, angulis posticis obtusis parvis; basi vix rotundato, elytris elongato-ovalibus basi vix emarginatis, striae punctatis, interstitiis modice convexis rugulosis, biserialiter subtiliter punctulatis, gula antice parce grosse punctata, postice laevi, prosterno parce punctata, abdomine confertim punctulato. Long. .42.

T. castanea, Mels. Proc. Acad. ii. 109.

T. brevicollis, Dej. Catalogue (?)

Texas, common. This is the broad depressed species so common in our Southern States. The thorax is broader than in the preceding species, and is less deeply and coarsely punctured.

17. *T. latcollis*, nigro-picea, modice depressa, capite thoraceque confertim subtiliter punctulatis, hoc transverso, latitudine duplo brevior, lateribus rotundatis, margine reflexo basi rotundato, angulis posticis obtusis parvis, elytris oblongo-ovalibus, basi vix emarginatis, humeris rectis, striae punctatis, inter-

[Feb.

stitiis planis, vix rugulosis biserialiter subtiliter punctulatis, subtus subtiliter punctulata. Long. .35.

Southern and Western States; Dr. Le Conte. Closely allied to the preceding species. Differing in the much more transverse thorax, and the flat scarcely rugulose interstitial spaces.

18. *T. bimaculata*, nigro ænea, subnitida modice depressa, capite thoraceque confertim punctulatis hoc transverso, lateribus rotundatis, margine vix reflexo, angulis posticis parvis obtusis, basi rotundato, elytris elongato-ovalibus, macula flava ante medium, basi vix emarginatis, versus humeros impressis, striis punctatis, interstitiis modice convexis, valde rugulosis, biserialiter subtiliter punctulatis, gula antice subtiliter punctulata, postice biserialiter transverse plicata. Long. .20.

T. bimaculata, Mels., Proc. Acad. ii.

Middle States, rare; Southern States common. May be readily distinguished by the subtransverse thorax with rounded sides and the brassy refulgence of the elytra, which have an irregularly shaped yellow spot, slightly in advance of the middle.

19. *T. obscura*, rufo-picea, subnitida, modice depressa, capite thoraceque parce punctatis, hoc transverso, lateribus rotundatis, margine modice reflexo, antice latiore postice vix angustato, angulis postice parvis vix acutis, basi modice rotundato, elytris oblongo-ovalibus, basi vix emarginatis, humeris rectis, striis punctatis valde impressis, interstitiis modice convexis, rugulosis, biserialiter subtiliter punctulatis, abdomine prosternoque parce subtiliter punctulatis, gula antice confertim punctulata, postice modice plicata. Long. .20.

Illinois; two specimens, Dr. Le Conte. Resembles the *bimaculata* Mels. The thorax is less transverse and sides less rounded, the punctures are coarser and less closely placed. The interstitial spaces are much less elevated and rugulose.

20. *T. rugosipennis*, rufo-picea, modice depressa, capite thoraceque confertim punctatis, hoc transverso, lateribus rotundatis, postice vix angustato, margine vix reflexo, angulis posticis obtusis parvis, basi modice rotundato, elytris oblongo-ovalibus, basi emarginatis, versus humeros impressis, striis punctatis, interstitiis convexis valde rugulosis, biserialiter subtiliter punctulatis, abdomine prosternoque parce punctatis, gula antice punctulata, postice subplicata. Long. .17.

One specimen, Pennsylvania; Dr. Le Conte. This is the smallest known North American species. Its form is more convex, and the sides of the thorax are more narrowed than in the other species of this group. The interstitial spaces of the elytra are very convex and rugulose, the intermediate rows of punctures are quite large, giving to the elytra a roughened appearance not seen in any other member of the genus.

B—4.

21. *T. obtusa*, ferruginea, subnitida, valde depressa, capite thoraceque confertim subtiliter punctulatis, hoc lateribus valde rotundatis, antice latiore, postice angustato, margine vix reflexo, basi rotundato, medio emarginato, angulis parvis minutis, vix prominulis, elytris oblongis, basi rectis, striis punctatis, interstitiis planis parce rugulosis, biserialiter subtiliter punctulatis, abdomine gula prosternoque parce subtiliter punctulatis. Long. .27.

Two specimens, Pennsylvania, H., Dist. Columbia; Ulke.

This species may be readily known from any other by its more elongated depressed form, the posterior angles of the thorax small, scarcely evident, and sides much rounded. The width of the base equals about one half the width anteriorly. Its form is more depressed than any other *Trogosita*, the lateral view being almost linear.

1862.]

The following species cannot be properly identified from the descriptions given:

T. americana Kirby, N. Z. 166.

T. subnigra Beauv., Ins. 127, tab. 32, fig. 9.

T. depressior " " 126, " fig. 7.

T. marginata " " 125, " fig. 3.

The *marginata* of Beauv. may be an immature form of *nana* Mels.; *depressior* may be *mauritanica* Linn. The catalogue of Dejean contains many species named from North America; as no descriptions have ever been given of the greater part of them, their synonymy cannot be determined.

Trogosita pusillima Mann. Bull. Mosc. 1843, 302, does not belong to the genus; it is, however, unknown to me.

Descriptions of PLANTS.—No. 3.

BY S. B. BUCKLEY.

GRAMINEÆ.

Polypogon alopecuroides, s. n.—Radice fibrosa; culmo erecto (6—8 policar.) glabro; vaginis glabris; ligulis elongatis (3—4 lin.) membranaceis integerrimis vel tarde fissis; foliis planis glabris (2—4 policar.); panicula terminali (1½—2 policar. lon. 3—4 lin. lata) densiflora; glumis paulo inæqualibus dorsis scabris marginibus hyalinis, apicibus brevi-aristatis; valvulis albo-hyalinis gluma ½ brevioribus, inferiore longe aristata.

Columbia plains, Oregon; Nuttall.

Bristles of the lower valve 3—4 lines long and more than double the length of those of the glumes; awn of the lower glume a little larger than that of the upper; rays short, fasciculated, compound and many flowered; glumes tinged with purple.

Vilfa agrostioides, s. n.—Culmo decumbente (3—4 pedali) glabro tereti; foliis linearilanceolatis; vaginis internodio parum brevioribus faucibus dense pilosis; panicula elongata 4—8 policari basi nonnunquam in vagina inclusa; spiculis glabris parvis ovatis acutis; glumis inæqualibus inferiore superiore duplo brevioribus; valvulis subæqualibus glabris acutis gluma longioribus; caryopsi rotunda ovata breviter apiculata glabra.

Llano County, Texas.

Panicles axillary and terminal; also often with their bases enclosed in the sheaths, especially in a dry season, when at least one-half of the panicle is thus encased; rays opposite or alternate, scarcely more than an inch in length and appressed; flowers numerous and tinged with reddish-brown; upper glume nearly as long as the palea, which are shortly pointed; throat of the sheath densely bearded with long white hairs, which sometimes extend about an inch downward on the margins of the sheath. Radical leaves a foot or more in length, and cauline leaves 2—6 inches long, and about 2 lines wide.

Sporobolus (Vilfa) angustus, s. n.—Radice fibrosa; culmo erecto 2—3 pedali, tereti simplice glabro; vaginis striatulis glabris internodio duplice brevioribus; ligulis nullis; foliis glabriusculis anguste linearibus apice setaceis; panicula elongata 5—8 policari anguste coarctata; glumis inæqualibus, inferiore ovata acuta vel obtusa valvula ¾—¾ brevioribus; superiore acuta inferiorem fere duplo excedente; valvulis inæqualibus muticis membranaceis acutis; caryopsi ovoidea ellipsoidea obtuse caduca.

Buchanan County. June.

Glumes variable, the lower being not half the length of the upper and obtuse, and again nearly equal to it in length and acute; valves nearly equal or one almost ¼ longer than the other, nerveless, or the lower obscurely 1—3 nerved;

[Feb.